



Mauritius Research Council



Ministry of Social Security,  
NS & SCW & RI



Mauritius Institute of  
Health

### **MRC Unsolicited Research Grant Scheme:**

## ***A Study of Risk Factors associated with Suicide among Suicide Attempters in Mauritius***

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### **EXECUTIVE SUMMARY**

#### **1. INTRODUCTION**

With suicide emerging as a public health problem, the Ministry of Social Security, National Solidarity and Senior Citizens Welfare and Reform Institutions commissioned the Mauritius Institute of Health to conduct a study on factors associated with suicide in Mauritius. The Mauritius Research Council funded the study. The research work was conducted amongst suicide attempters instead of using the classical method of psychological autopsy of interviewing parents of the deceased.

The objectives of the study were to:

- ❖ determine the number of suicide attempts in Mauritius from June 2001 to June 2003,
- ❖ identify life events and psychological factors influencing suicide,
- ❖ determine the influence of psychiatric illness on suicide,
- ❖ determine the methods used to commit suicide,
- ❖ determine the general awareness of local institutions offering support against suicide, and
- ❖ make recommendations with a view to reducing suicide, especially among youth in Mauritius.

#### **2. METHODOLOGY**

A population-based case-control study was undertaken among suicide attempts occurring between June 2001 and June 2003. People aged 10-40 years who attempted suicide during that period were considered as cases. People of the same age group, gender and residential area did not attempt suicide were considered as controls. 400 cases and 800 controls were randomly selected and matched for gender, age and region in the ratio of 1:2. Data were collected by means of face-to-face interviews, conducted through the use of a pre-designed and pre-coded questionnaire. Interviewers and supervisors were trained prior to interviews. 1,200 respondents were successfully interviewed within 1½ months.

### 3. FINDINGS

According to estimates from key informants and statistics, the annual rate of **suicide attempt** was 92 per 100,000 population in Mauritius. The rate of **completed suicide** was 21 per 100,000 population - 18 among males and 24 among females.

Most suicide attempts were among the residents of rural areas. The other parameters were - female, youth, both single and married, with a low level of education and unemployed. Over a third of suicide attempts had a previous history of 1 to 2 attempts. About a quarter signified their intent and had premonitions/dreams of committing suicide. The majority chose a method available at hand. They mainly absorbed agricultural chemicals (54.2%) or swallow prescription drugs (37.8%). Very few of them attempted suicide by cutting their blood vessels, jumping from height, setting fire or drowning themselves.

There are a number of risks and protective factors influencing suicide, and these occur at three distinct levels.

**At the individual level**, parents death during childhood (42.5%), use of alcohol (41.6%), financial problems (38.0%), parents' death shortly prior to attempt (29.5%), loss of position or prestige (29.0%), loss of a loved person (20.0%), breaking of a love affair (22.8%), separation from dear ones (13.8%), serious accidents during childhood (5.0%) and suffering from fatal diseases (2.8%) were linked to suicide attempts.

Childhood trauma including physical, sexual and psychological abuse, substance abuse and previous suicide attempts/ deliberate self-harm also contribute to despair leading to suicide. Some cases suffer from mental illness during childhood (5.5%) and at the time of attempt (14.3%). These cases are 3 times more likely to be both stressed (85.3%) and depressed (32.0%). Depression is common among people being despised by relatives and friends, those who lose self-esteem and prestige, those who regularly disagree with friends and families, and among those with a history of previous suicide attempts and other mental illnesses.

**At the family level**, dysfunctional family relationships which mainly include quarrel/fights with parents and spouses (71.8%) and fights with in-laws (28.1%) emerge as the main factor.

**At the social level**, an adverse environment where violence among families prevails (38.5%), where illicit drugs are sold (24.8%) and where there are numerous criminal offences (20.8%) and robberies (40.2%) accentuate the risk of suicide.

Overall, dysfunctional family relationships, love breakdown, loss of parents during childhood, addiction to substance use, financial problems and mental illness mainly trigger suicide attempt.

In contrast, there are factors, which protect against suicide. An environment where people help each other (82.4%), a safe neighbourhood (78.5%) and an environment where people often visit each other (71.9%) minimise the risk of despair. Parents who show concern and feelings for the problems of children (87.8%) and parents who seriously consider problems of children (13.8%) appear as invaluable support to youth. Participation in sports (35.6%) and social work (26.3%) and the early identification and treatment of psychological problems also avert suicide. The knowledge and use of support services against psychological problems is of equal importance.

#### **4. RECOMMENDATIONS**

In view of the increasing rate of suicide in Mauritius, a national prevention strategy needs to be put in place for a comprehensive campaign. Hence, this study recommends some measures, which aim at prevention at the primary and the post-intervention levels.

##### **Primary level – To reduce incidence of suicide**

- 1.1 Monitor risk behaviour in the community.
- 1.2 Promote awareness of suicidal tendencies and conditions related to them.
- 1.3 Promote public policies to reduce access to commonly used methods of suicide.
- 1.4 Train appropriate personnel for suicide prevention programmes.
- 1.5 Educate public against stigma for substance abuse and mental illness.
- 1.6 Compile update information on suicidal trends for the design of action plans.

##### **Post-Intervention level - To target survivors of attempted suicide**

- 1.7 Form suicide survival groups.
- 1.8 Help families of para-suicidal individuals to deal with attempts.
- 1.9 Deliver appropriate professional help to survivors of suicide.
- 1.10 Increase access to appropriate health and welfare facilities for survivors and people with suicidal tendencies.
- 1.11 Encourage people with substance abuse problem, suicidal tendencies and mental illnesses to seek help.